FIVE-LETTER WORD PATTERNS

EDWARD R. WOLPOW
Brookline, Massachusetts

Excluding patterns with three or more consecutive identical letters, there are 41 different patterns for five-letter words:

- **abcde**
  - 1 pair: aabcd, abacd, abcd, abcd, baacd, bacad, bacad, bacda, bcaad, bcdada, bcdaa
  - 1 triple: aabac, aabca, abaca, abaca, abaca, baaca, baca, bacca
  - 1 quad: aabaa
  - 2 pairs: aabbc, aabcb, aacbb, ababc, abacb, acabb, abbc, abbc, abbc, abcba, acbba, caabb, cabab, caba
  - 1 pair: aabab, aabba, abaab, ababa, abbaa, baaba, babaa
  - 1 triple

Words corresponding to most of these patterns can be readily found in unabridged dictionaries or gazetteers; in fact, there are thousands of examples for some patterns. In this article, I illustrate each pattern with a set of words exhibiting all possible alphabetic permutations. For example, the pattern abc can be illustrated with the six words can (213), you (312), dig (132), for (123), the (321) and nub (231), where the three-digit sequences indicate the alphabetic order of the letters.

In the November 1978 Word Ways, the editor gave a list of 120 words showing all alphabetic permutations of words with the pattern abcde; I extend this study to the other 40 patterns in the tables below.

In each table, the column at the far left specifies the permutation of the letters. For example, the third permutation, 1324, states that for all words in this row the a-letter in the pattern must be earliest in the alphabet, followed by the c-letter in the pattern, followed by the b-letter in the pattern, followed by the d-letter in the pattern. In the second column, for example, the basic pattern of all the words is abcd. The word every has the pattern abcd and the alphabetic permutation 1324; e (the a-letter) comes before r (the b-letter), which in turn comes before y (the c-letter), and the latest letter is y (the d-letter). Most words can be found in the Second or Third Editions of Webster’s New International Dictionary of the English Language, or are inferred forms such as plurals of nouns; words labeled * are in the OED, and proper names labeled § are in the Times Index-Gazetteer.

My thanks to the editor for various additions and improvements to the tables.